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Russia's automotive industry facing international competition

An analysis of the impact of Russia's WTO accession

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<p>Russia has accessed to the WTO (World Trade Organization) in December 2012. After the accession a various number of changes has to be implemented due to the first years after the accession, in order to make the country's trade and economy compliant with the WTO's regulations.</p> <p>The economy of the Russian state has been recently developing in terms of the exports of the natural resources. A number of industries have been protected from the foreign competition by the local government. In case of the Russian automotive industry, it has been protected by the high import taxes on the foreign vehicles (25% import tax for new vehicles and 30% for vehicles used less than 5 years). This has also brought a number of foreign car manufacturers, such as Renault, Toyota, General Motors to the local markets, utilizing the local manufacturers' premises for producing the foreign branded vehicles.</p> <p>Upon the accession to the WTO the import tax on the new light vehicles has to drop to 15% and to 10% for the used light vehicles.</p>	
Keywords	Russia, WTO, automotive industry, AvtoVaz

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1 Introduction

Russian Federation applied for accession to the World Trade Organization (WTO) in June 1993. Being at that moment a weak economy, which suffered from the transition from the planned economy to the market-based one, Russia was seeking for all the possible benefits and advantages to build up the new economic system.

Russia's accession to WTO was ratified only in August 2012, after a series of negotiations and debates, which was the longest period (19 years) between the application and accession in the history of the WTO. Nevertheless, the economic situation in Russia has changed greatly since the application date. Early 2000s were symbolized with Russia's economic growth, which was provided by Putin's commodity-based economic development policy.

Joining the WTO would bring Russia numerous advantages in terms of trade and foreign direct investments and diversify the economic structure. On the other hand, some domestic industries, such as automotive, agriculture and services became sensitive to competition from abroad, due to multiple reasons: local subsidizing and governmental support, losing previous tax advantages.

The main problem to be analysed in this work is the development of automotive industry (based on the experience of Joint-Stock company AvtoVaz) in Russia in terms of the obligations towards the WTO. A list of sensitive industries is set to certain transaction periods, in order to adjust to the new rules and policies. By sensitive industries are meant such ones, which are supposed to lose in profits shortly after the WTO accession. The list of sensitive industries is determined by several factors, such as limited competition in the past (due to the high import taxes), governmental support (subsidizing, privileged taxation), worse development comparing to the foreign competition¹.

Automotive industry is among the list of the sensitive industries and is subject to a 6 years transition period. Before the WTO accession Russian government had been consequently raising the import taxes on the light and commercial vehicles, and by that promoting the local vehicles production. The rise in import taxes has influenced positively the boom in the volumes of domestic vehicle production and development of certain Russian regions (Volga region as example), but it had negative consequences too, such as trade losses in the border regions (Smolensk, Kaliningrad, Vladivostok and

Khabarovsk), establishment of the weak market with limited competition. In other words, those arrangements can be considered short-term ones, in order to support the industry temporarily and avoid not only economic, but also social risks. In a long-term perspective, protectionism was not an option, due to the WTO accession plans.

	Before accession to the WTO	Upon accession to the WTO									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Commercial vehicles (5-20 tons)											
New	25%	15%									
Used, less than 5 years	30% and additional rate of €2.2 per 1 cc of engine capacity	10%									
Used, 5-7 years	€4.4 per 1 cc of engine capacity	10%, but not less €1 per 1 cc of engine capacity									
Used, over 7 years	€4.5 per 1 cc of engine capacity	€1 per 1 cc of engine capacity									
Commercial vehicles (over 20 tons)											
New	25%	10%			5%						
Used, less than 5 years	30% and additional rate of €2.2 per 1 cc of engine capacity	15%			10%						
Used, 5-7 years	€4.4 per 1 cc of engine capacity	15%, but not less than €1.2 per 1 cc of engine capacity			10%						
Used, over 7 years	€4.5 per 1 cc of engine capacity	€1 per 1 cc of engine capacity									

Sources: Unified Customs Tariff of the EurAsEC Customs Union, open sources

Figure 1, Changes of import duties as a result of Russia's accession to the WTO (Ernst & Young, 2013, p. 20)

Shortly after the WTO accession, it became publically known that the biggest car-maker AvtoVaz would create a joint-venture production with the Renault-Nissan alliance, where the French-Japanese alliance would have 67% of the shares.

The aim of this thesis is to research three possible outcomes within the current situation and through the perspectives of different economic models for each scenario.

Behind each model there are core pre-requisites to consider:

- Different levels of governmental involvement
- Consumer purchasing power
- Accessibility of bank loans for car purchasing
- Energy prices

After analysing the possible outcomes and scenarios of the further development of Russian Automotive industry, my thesis will include the possible solution on how to make this particular national industry being competitive in Russia and globally. The global competitiveness for the Russian automotive industry is essential after the accession to WTO, since the industry becomes vulnerable to the foreign influence. In order to analyse the possibility of the industry becoming competitive the solution was proposed

based on Michael Porter's research "The competitive advantage of Nations", published in 1990 in Harvard Business Review.

In order to analyse the data from multiple perspectives, the research would be done in English and Russian languages, but based on English-language sources mainly.

2 Russian automotive industry prior to the WTO accession.

2.1 Post-Soviet stage of development

AvtoVAZ was the largest automobile manufacturer in the Soviet Union and still holds this position in modern Russia. It was founded in 1966 and the first vehicle was manufactured in 1970ⁱⁱ.

After the collapse of the USSR in 1991, AvtoVAZ faced several problems common in this time in new Russia:

1. transfer from the planned economy
2. bankruptcy risk
3. privatization policy

In mid-90s AvtoVaz had around 2 bln USD debt and was consequently involved in a partial privatization to pay off debts and avoid bankruptcyⁱⁱⁱ. Thus it failed to attract the foreign investors due to multiple reasons, such as involvement of different Russian tycoons – Berezovskiy, Potanin and government's inability to cover part of the debts.

Another major factor influencing the industry was its localization. Besides AvtoVaz, situated in Samara region, another major car manufacturer GAZ is situated in Nizhny Novgorod region, UAZ in Ulyanovsk region and KAMAZ in Tatarstan. These regions are situated on the bank of the Volga River and in a close distance from each other. During the Soviet time and due to the planned economy the automotive industry there dominated the economy and provided population with the stable employment. Concentration of the industry could be also explained with the developed logistics, due to the USSR's constant preparedness for a war in the context of the Cold War.

After the collapse of the Soviet Union, high concentration of the automotive industry resulted in negative performance of these regions in total, making high unemployment rate and transforming it into one of the poorest areas with the lowest GDP per capita.

2.2 Growth in 2000s

The 2000s in Russia are symbolized with Yeltsin departure as a president of Russia and Putin's seizure of power. With Yeltsin's departure a vast lobby of Russian tycoons, or "oligarchs" were sequestered from the major industries: Mikhail Khodorkovskiy, Vladimir Gusinskiy and Boris Berezovskiy being the three most prominent.

While in 90s Berezovskiy and Vladimir Potanin were highly involved in AvtoVaz' privatization and the bankruptcy case^{iv}, in 2000s Putin's government took an active participation in future development of the country's biggest manufacturer. In order to boost the sales, there were manufactured updated models of LADAs - Priora, Kalina and the government took actions on the import tariffs.

It was clear that the locally made LADAs could not compete with the imported cars in terms of quality, price and demand. Consumers were not willing to pay for a locally manufactured car, with its old equipment, design from the 1970s and a poor overall reputation.

The tariffs were risen in 2008 up to 30% on the imported autos^v. That not only boosted the sales of the locally made LADAs, but also influenced multiple border regions, such as Kaliningrad (bordering Lithuania and Poland), Vladivostok (sea border with Japan), and Khabarovsk (bordering China). A large number of small entities, specializing on the imported cars sales were closed.

Besides that the Russian government was keen on attracting the foreign investment from the major international car manufacturers, in order to establish the joint-ventures with the local companies. Eventually AvtoVaz has created a joint-venture with General Motors (GM-AvtoVAz) and the first product "Chevrolet-Niva" was introduced in 2002^{vi}.

2.3 Post-WTO situation

After 2005 AvtoVaz' sales and manufacturing numbers boomed not only because of the higher tariffs on imports, but also a successful car scrapping utilization program in early 2010, which enabled the customers of the old LADAs to change their vehicles to newly produced LADAs with paying the nominal difference in the price. Along with that there was a great number of credit programs established within many banks. These

measures were established with the high involvement of the government, not only on an administrative level, but in the financing too.

As mentioned above, one of the main terms of Russia's accession to the WTO was lowering the customs duties on imported vehicles. Besides that the Russian government has set a number of requisites to foreign manufacturers that are willing to assemble the foreign cars on the territory of Russia for the local market.

The requisites for such manufacturers, which operate in Russia are following (2011 agreements with Renault-Nissan, GM, Ford):

- usage of local components up to 60% with an output of 300000 vehicles annually;
- 30% of the foreign car brands manufactured in Russia have to be equipped with the locally produced engines and gearboxes^{vii}

3 Russia – Political, Economic and Social Overviews.

These overviews are similar to a PEST analysis (Political, Economic, Social, Technological analysis), excluding the Technological part of the analysis, in order to avoid self-repeating, since the technological overview of Russia has been discussed in the thesis previously (Chapters 1 & 2). These overviews are done in order to understand the current environment of doing business in Russia in terms of the changes in politics, economics and society in the past decades after the dissolution of the USSR in 1991.

3.1 Political Overview.

After the USSR collapse, Russia has been experiencing some time of political instability, just like any other Eastern European state in early 90s. Separatist mood in Northern Caucasian republics, which are part of Russian Federation, has led to various civil wars in the region^{viii}. The Chechen war has influenced the separatist mood within the country and therefore Kremlin's reaction was simple – to bring back Moscow's authority, by deploying the military troops to Chechnya. This led to two wars in middle 90s and in the beginning of 2000s. With the second war, being led by Putin, who just began his first President term, Chechnya suffered from rebels' terror and numerous victims among the civil population. At the moment, the Chechnya is led by Republic's President – Mr Ramzan Kadyrov, who has been appointed by Putin. The current situation in Chechnya and the region has improved, due to the strong authority of the local governments and constant financial aid from the Federal budget.

As it was mentioned before, Vladimir Putin started his first president term in March 2000, after Yeltsin resigned on December 31st 1999. With a past KGB background, he proved to be a strong leader of the country, managing to unite the diversified political scene. Though, the consequences in terms of the lack of freedom of speech and elimination of his main political opponents have followed.

Currently, Vladimir Putin is on his 3rd president term, after being a Prime Minister (head of the Russian government) during 2008-2012 president term of Dmitry Medvedev. So-called tandem has emerged in early 2007, when Putin's second term was expiring and due to the Russian Constitution it is impossible to become a president for a 3rd consecutive term^{ix}.

The parliament elections of 2011 and president elections of 2012 have proved that Putin's popularity among the population of the major Russian cities, such as Moscow and St. Petersburg, has lowered, comparing to the previous times. The elections have been accompanied by a big number of protests, organized by un-unified opposition powers^x. Even though the opposition powers were not unified and had neither a leader nor a common program, but the reasons of the rallies were clear – political and economic stagnation in the country, along with a corrupted and non-transparent political system^{xi}.

Summing this up, Russia's political system currently is far from being unstable and vulnerable to external influences, such as political rallies, protest and growing opposition. The authoritarian regime, which has been establishing since late 1990s has proved to be strong and stable, since the big popularity of the ruling party "United Russia" and the country leader Vladimir Putin. Even though, the opposition has been growing among the population of Moscow and St. Petersburg, Putin's position in the rest of Russia's regions has been strong.

3.2 Economical Overview.

When Vladimir Putin has started his first president term in 2000, Russian economy was still suffering from the consequences of the 90s policy of "shock therapy", uncontrolled privatization and the economic crisis of 1998.

The shock therapy policy was implemented in 1992 by Yegor Gaidai (Spulber, 2003), one of the Yeltsin's era reformists and economists. According to Nicolas Spulber, the shock therapy was supposed to enable "prices free to find market-clearing levels, freed the private sector from bureaucratic restrictions, set in motion the processes of privatization, and maintained macrostability by restructuring credits and balancing the budgets."

The most important institutional change of post-Soviet Russia was the policy of privatization (Spulber, 2003). The transition from the state property to widespread private property was led in multiple steps. The first laws of privatization were implemented by the Russian Soviet Republic within USSR in mid-1991, which never came in force because of the USSR collapse. Meanwhile, the members of the Communist party who had high ranks within local governments, started an illegal and chaotic privatization of

the state-owned enterprises and estate. Shortly after the USSR collapse, the new Russian government had finally implemented the policy of privatization, where the population was able to purchase the privatization vouchers, thus this program did not include the state farms, land and housing. By the beginning of 1993, the whole population of then-Russia has purchased all vouchers. In addition, according to this policy, the workers of the various enterprises were granted with 25 percent of the respective enterprise's shares.

However, the corporate privatization policy ended up benefitting management level more than the employees, since most of the shares were distributed among the top level. By mid-90s the economy has been mainly controlled by local tycoons, who have managed to privatize a large number of previously state-owned industrial enterprises.

Russian transition path from the state-planned economy to a market one has been uneasy and had affected the population and stability within the country. The GDP per capita had been decreasing along with rising inflation rates and widely spreading corruption (Spulber, 2003).

The economic crisis of 1998 has concluded the mistakes made by Yeltsin's government. Even though, year 1997 was a breakthrough year for Russian economy (Connor, 2008) with notable improvements from the previous post-USSR years. Mainly it happened due to the then-record high prices for oil (23 USD per barrel), which helped greatly to decrease the inflation levels from 2,600 percent in 1992 to 11 percent in 1997. Another major influence on economy was the external financial help from the International Monetary Fund (IMF).

The first signs of the upcoming economic crisis in Russia came from Asia with the currency crisis in 1997. According to John Connor's work, the currency crisis in Asia has impacted Russian economy in various ways. Firstly, a large number of export partners were originating from Asia, later the crisis has impacted the oil prices and by 1998 the price per barrel fell from then-record high to the lowest point of 11 USD. Among the biggest mistakes made by the government was keeping a considerably high price for the national currency Rouble. At that times it was a heritage of the Soviet Economy, whereas keeping Rouble artificially expensive to USD was considered as a sign of a robust economy. Another challenge faced by the Russian government was a low income from the tax collection, since most of the population and enterprises were not

paying taxes either in time or at all. According to Connor, only about 40 percent of the employed population was paid salaries in time, which led to the low tax payments.

On the other hand, the private sector has played a significant role affecting the economy negatively and leading it to the economic collapse (Connor, 2008). An immature banking sector had been constantly stimulating the lending with the help of the money from the state. The top management of the banks and private sector enterprises did not have enough expertise and knowledge of fiscal policies and free market structure in order to operate in the new economic environment. A great amount of money has been invested by new Russian tycoons in the economies of other countries, but not Russia.

In 2000 Russian economy started changing and stepping to a conservative fiscal management path. After Putin has been elected as a president for his first term, the previous almost laissez-faire economy model has been dropped. In order to control the oil revenues, Russian government has established a Stabilization Fund in order to receive a share from the revenues (Connor, 2008, p. 16). Besides the privatization projects of electricity sector, the complete privatization of the wireline telephone industry has started (Connor, 2008, p. 17).

The beginning of Putin's era is marked by the strong and stable GDP growth (see figure 1) (Wolf, 2006, p. 8). According to Wolf, between 2000 and 2005, the foreign debt of Russia was reduced from 50 percent of Russia's GDP to 30 percent, the debts towards the IMF and Paris Club were repaid ahead of schedule. This strong performance is explained by the increased prices of natural gas and oil, its production, exploration and exports (Wolf, 2006, p. 8).

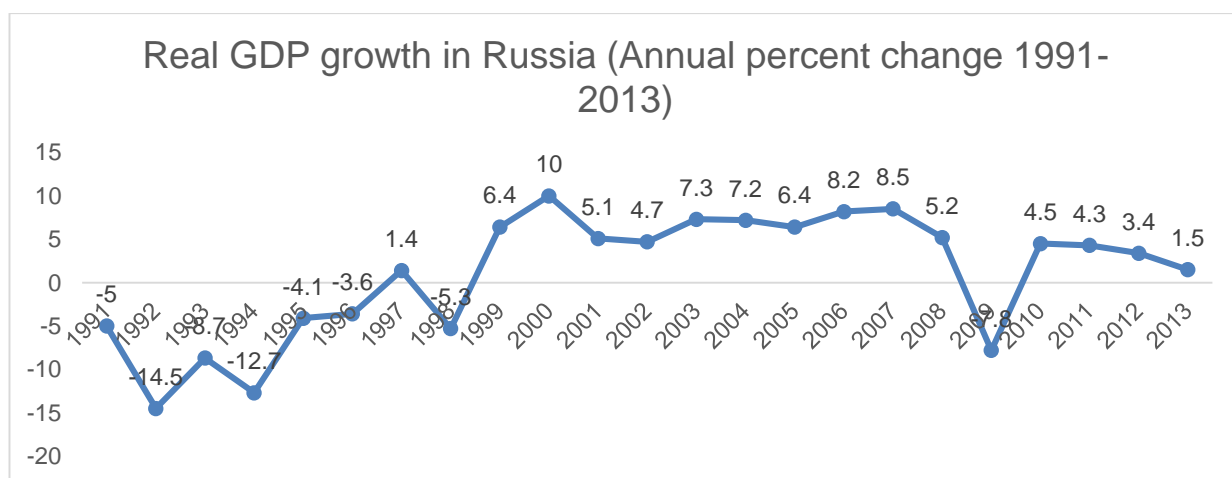


Figure 2, Real GDP growth in Russia. Source: IMF, <http://www.imf.org/external/datamapper/index.php>, last accessed April 1st, 2014.

Wolf offers multiple explanations to the significant growth of Russian economy (Wolf, 2006, p. 13) in his work. At first he states that it was natural after the “shock therapy” of 1990s, since Russian economy needed time to recover after the dramatical changes in the economy model and reformations, which were harmful to the state. Another reason was the sharp rise in the oil prices, whereas Russia had an opportunity to benefit of, stabilization of the local currency after the economic crisis in 1998 and changes in the taxation. Nevertheless, the positive changes in economy have proved Russia becoming an economy, dependent on the natural resources and commodities (Wolf, 2006, p. 17).

Apparently the dissolution of the Soviet Union has made an impact not only on Russia, but also on all other former republics of the USSR. For smaller economies of the Baltic States it has been an easier path to integrate into the new economy model, thus the larger economies suffered the most. Russian economy has gone through a great number of challenges and changes since 1991, after the collapse of the USSR and creation and development of the own state with a market economy. Development of the new economic model with limits of losing a number of additional territories, went stressful and noticeable for a big economy like Russia's. The number of transformational reforms made in 1990s proved to be unpopular with society and unsuccessful in general, bringing the country to the new extremes. In general, the external factors and the global market of natural resources have helped the government to stabilize the situation and create the funds for the further economic development.

3.3 Social Overview.

One of the major challenges Russia has faced after the dissolution of the USSR was the constant demographical decline in the population. This can be explained by unfavourable economic environment, opening up the borders for the multiple ethnical minorities to immigrate to another countries (Jewish minority, Volga Germans) and non-efficient social policies. The change in the population size can be seen in Figure 2.



Figure 3, Russia's Population 1989-2013. Source: IMF, <http://www.imf.org/external/datamapper/index.php>, last accessed April 1st, 2014.

Based on the data from the International Monetary Fund (IMF) there can be seen the constant decline in Russia's demographics. According to Connor, the population of Russia was declining a about three-quarters of a million people per year (Connor, 2008, p. 17), explained by the high death rates among the working-age males caused by the heart deceases, alcoholism and unhealthy working conditions.

In early 2000s, in order to fight the population declining numbers, the government has implemented a number of National Projects, supporting the population well-being and trying to improve the situation. The implementation of the National Projects aimed on the social aspect of Russia, has been enabled due to the economic growth and ability of Government to spend the money (Connor, 2008, p. 17).

The Health Care project was among the most important projects of Putin's social reforms. With its high death rates of the working male population, Russia is one of the countries with the highest death rates, with a male life expectancy at 60 years and a female life expectancy at 74 year respectively (Connor, 2008, p. 18). According to Connor's research, mostly the high death rates are attributed to cardiovascular diseases, alcoholism, dangerous workplace conditions, tuberculosis and HIV/AIDS. The health care system faced numerous changes under the project, such as changing the hospitals funding from the "number of beds" and staff employed model to a number of patients treated model. Another criteria for a change was a high concentration of the doctors in urban areas and a lack of the specialists in the rural areas, therefore the utilization of the specialists was inefficient and centred in the largest cities of Russia.

Nevertheless, these changes have been done in order to support the well-being of the Russian citizens. The whole healthcare reformation would be incomplete without supporting the growth in the birth rate. In order to support the growth increase in population, the first program of the "childbirth certificates" and a monthly financial aid for mothers and newborns was implemented (Connor, 2008, p. 19). The certificates provided the young families with additional funds for raising children and provided with more benefits, if there were several children in the family. Another program to enhance the birth rate and, according to Connor, stimulate having more than one child in the family, was the creation of so-called maternity capital program. Maternity capital includes a single payment of 250,000 roubles to the mother, in order to spend on the home improvements, children's education and various needs.

Summarizing the overviews, the collapse of the Soviet Union has influenced today's Russia dramatically. The change from the socialist political, economic and social models has been executed on the society, which was not prepared to these changes. Additionally, we can see that the Russian government became keen on the internal problems in healthcare, after realizing the dramatic decline in the population numbers, caused by the ineffective healthcare and economic problems.

4 Possible outcomes and scenarios after the WTO accession

WTO accession in general brings a lot of advantages and disadvantages to the Russian economy. Some of the industries, which were already independent from the governmental involvement, such as services, will remain strong and would only benefit from the WTO. Other industries, the ones highly dependent on the government financially, become vulnerable and would need time to recover and adapt (a so-called transition period).

With the automotive industry, currently there are three possible outcomes and ways of development during the transition period. These outcomes have the same core prerequisites and are strongly connected to the different economic models.

The outcomes are based on the following core prerequisites, such as governmental involvement. It is either minimal, medium or a maximal one. Taking into account, that the involvement of the government is highly dependent on the current political situation and Russia's relationship with the rest of the world, it is important to prepare the PESTLE analysis for each of the scenarios.

In the late 2000s Russia has been considered as one of the booming markets with constantly growing purchasing power of the population, which can be explained by its commodity-based economy and the rising prices for natural resources.

The natural and especially energy resources themselves play a big role in the scenarios, as firstly their growing prices affect the market and the consumers. Furthermore, the steel manufacturing in Russia has been highly involved in the car manufacturing. Basically, the decreasing number of the manufactured and assembled cars in Russia will directly influence the steel manufacturers.

4.1 Pure localization

This scenario involves government's minimal support for the automotive industry. Taking into account the past political involvement in the industry, this scenario has the least likely chance of happening.

Based on the laissez-faire model, this scenario would exclude the government from the industry and let it develop during the transition period by itself¹.

Since Renault-Nissan already has its controlling shares in AvtoVaz^{xii}, the government does not really have much control over the manufacturer. Based on the laissez-faire model, the relationship between both parties face few government restrictions.

What can possibly happen between 2013 and 2018 in this scenario:

- maximization of the Renault branded cars assembled in Russia, with the local spare parts and the local steel;
- AvtoVaz further sell-out. At the moment 25% of Avtovaz shares belong to the French car manufacturer Renault. By mid-2014 the joint-venture Renault-Nissan will enter in a deal with the Russian government-owned corporation “Russian Technologies” (Rostec), where 67,13 % of AvtoVaz will belong to French-Japanese venture and the rest 32,87% will be held by “Russian Technologies”.

Therefore there will be little input on the Research and Development and development in local manufacturing, since a lot of developed technologies will be borrowed from Renault-Nissan venture.

This can lead to the Renault-Nissan and the other manufacturers, such as General Motors or Toyota to relocate its production to China or Latin America, due to lower labour costs and the future lower tariffs on car imports. Basically the whole Russian automotive industry would serve as a temporary appendage during the transition period of lowering the import taxes.

4.2 Smart localization

In this outcome there should be considered a medium involvement of the government and at the moment it has the strongest chances to happen.

¹ Laissez-faire, according to encyclopedia Britannica (<http://global.britannica.com/EBchecked/topic/328028/laissez-faire> , last accessed on March 29th, 2014), is a policy of minimum governmental interference in the economic affairs of individuals and society.

The above mentioned manufacturers would maximize production of their own brands on the territory of Russia, using the local manufacturing facilities and the local production assets.

Meanwhile the government would invest into the Research and Development programs with the help of the foreign companies. Traditionally, Russia had a strong engineering school, which has been struggling after the collapse of the Soviet Union. Another major problem happened after the USSR collapse was the “brain drain” – when a great number of local engineers has moved abroad to work for the foreign companies during the 90s and 2000s.

During Medvedev’s presidential term from 2008 till 2012, Russian government has been keen on innovations and promoting engineering education in Russia. One such educational innovation project was establishment of Skolkovo Community, which includes the education centre, consisting of Skoltech (Skolkovo Institute of Science and Technology), Open University Skolkovo and Elementary School & Association of Elementary Schools^{xiii}.

Skoltech was one of the first educational institutions in Russia, established in collaboration with a foreign university (Massachusetts Institute of Technology). According to its webpage, Skoltech educates “global leaders in innovation, advance scientific knowledge and fosters new technologies to address critical issues facing Russia and the world”. At the moment, the school offers English language Master programs in such areas as Biomedicine, Energy, IT, Nuclear Science and Technology, Space Science and Technology.

Skoltech collaborates with a great number of the industry leaders of various industry areas from Russia and abroad. Members of working group for Research and Development in Materials and Structures includes such companies as Railway Research Institute, United Engine Corporation, Russian Highways and etc.

Establishment of Skolkovo Community clearly looks like creating a Russian-based “Silicon Valley”, with its own R&D and educational institutions. This effort clearly seems as a great investment in the economy and the educational purposes for the local talents, which has been lacking in the 90s.

Taking into account the presence of such automotive giants as Nissan, Renault, General Motors and Toyota in Russia, there has to be a maximisation of R&D in automotive engineering, using the assets of the automotive giants. The existing program in Skolkovo does not offer a vast education in automotive industry, thus the market has been growing along with the purchasing power of the population. That clearly indicates that the foreign corporations are not interested in developing the local assets, but prefers simply localizing the production.

In order to change such an approach of the international giants, the government and the local institutions have to offer long-running and valuable grounds for investments.

4.3 Pro-active localization

This localization scenario includes the active governmental involvement into developing the local automotive industry along with the key players from abroad.

Besides the points on the production maximization in the previous scenarios, this one includes the long-running vision and strategy for the Russian government and local manufacturers.

Currently Skolkovo is running on the pilot programs and will implement its full educational capacity only in 2015. Meanwhile, there is a number of innovative companies being established, which is waiting for the recent graduates.

Basically, in this scenario, we can assume that the Renault-Nissan co-operation would stay with production in Russia after 2018, when the import tariffs will hit their lowest mark, as required by the WTO accession terms. But that also means that the Russian government would lose total control over the consumer automotive market, which it has been keeping in its hands for almost 10 years.

On the opposite of the mass consumer market, companies which target the special markets can find a niche in the Russian automotive industry with the help and involvement of the government.

Currently, there are two manufacturers that are keen on developing innovative markets, such as e-cars and racing cars. It's clear that the development of such enterprises can

boost local R&D and help the local manufacturers to find its niche on the international automotive market.

The first Russian company, which specializes in hybrid cars, is “Yo-mobile”, founded by Onexim Group in 2010 with a high involvement of Russian tycoon Mikhail Prokhorov^{xiv}. The first Russian hybrid cars would cost approximately 12,000 – 15,000 USD^{xv} and be positioned as eco-friendly city-vehicles. Due to the problems in the development, the sales of the vehicles were pushed to early 2015. The stated production volume of 90,000 vehicles was lowered to 40,000 vehicles in summer 2013, due to cost optimization reasons^{xvi}. On April 7th, it has been announced that the production of “Yo-Mobile” has been ceased and the project ownership has been transferred from Onexim Group to the state-owned Central Automotive Research Institute^{xvii}.

Clearly, the high involvement of Prokhorov, who has been a candidate for the President post in the election run in 2012 and his popularity among the Moscow and St. Petersburg population, has not affected the sales potential of the “Yo-mobile”. The lack of local R&D and the costs for production of dual engine abroad, which runs on gasoline and natural gas, forced the venture to lower the production volumes and ambitions. In other words, the efficient and optimized development and production of a local hybrid vehicle depends mainly on the local assets.

The other venture that occupies a specialty niche in the Russian market is Marussia – the first Russian premium-cars manufacturer. The company was founded in 2007 by Nikolai Fomenko, former racing driver and entertainer^{xviii}. At the moment, Marussia has one model in production and on sales – B1 and another model B2 – on sales and out of production.

Since Marussia positions itself as an exclusive brand, only 2999 B1 model vehicles are planned to be manufactured in Moscow^{xix} and the price starts from 120,000 EUR. Another model, which positions as a super-exclusive, B2 had a production on 500 units only with the prices starting from 130,000 USD. Since the model had a great popularity and filled orders, the production location was expanded to Finland^{xx}. This was done since the Marussia B2 project is a co-joint production between Russian-based Marussia and Finnish based Valmet, therefore in order to meet the demand, the production was moved to Finland.

Exclusivity, efficiency and high quality of the brand, have allowed Marussia forming an F1 Marussia team and creating an F1 car MR02.

Nevertheless, an early success of Marussia does not indicate the future strategy of the whole automotive industry in Russia. There has to be implemented a long and clear program of investments from multiple parties on developing the proper R&D program for the whole industry.

5 Competitive Automotive industry in Russia

This part of the thesis will be dedicated to the solution, mentioned in the introduction, on how to make the National Automotive industry competitive in terms of the local and international markets. This part of the thesis is based on Michael Porter's article "The Competitive Advantage of Nations", published in Harvard Business Review in 1990.

5.1 How to make the automotive industry competitive?

Firstly, there have to be identified the major local players in the industry. Previously, there has been mentioned AvtoVaz, the oldest car manufacturer and the leader of the industry, owned by the French-Japanese alliance of Renault-Nissan. Other major player from the industry are UAZ in ("*Ulyanovskiy Avtomobilniy Zavod*", eng. "Ulyanovsk Automotive Plant") which specializes in manufacturing of SUVs and trucks, GAZ in ("*Gorkovskiy Avtomobilniy Zavod*", eng. "Gorky Automotive Plant"). Both plants along with AvtoVaz are located at the Volga Federal District, e.g. AvtoVaz is situated in Togliatti (Samara region), UAZ is in Ulyanovsk and GAZ is in Nizhny Novgorod.

According to Porter, in order to become competitive for the company, it has to go through acts of innovation (Porter, 1990 (March-April), p. 75) and these innovations have to include both new technologies and new ways of doing things.

As it has been mentioned previously in the chapter 3 of this thesis, is that AvtoVaz is jointly co-owned by the Russian government-owned corporation Rostec and by the French-Japanese alliance of Renault-Nissan. This gives AvtoVaz an ultimate advantage of using the technologies and innovations of both Renault and Nissan, which are more advanced. According to Porter, based on the research on Japanese automakers, the companies which wish to get the competitive advantage, among of all things should take advantage on the foreign technology. Taking into consideration the amount of time and resources, which can be spent on own research and development, the Russian car manufacturers can use the technologies of their foreign counterparts.

Previously in the thesis there have been covered three possible outcomes. In the first possible outcome "Pure Localization" (see Chapter 4.1), there have been discussed the minimal governmental support to the automotive industry. Taking into consideration the Russia's accession to WTO, the governmental influence on the industry seems to be

minimal in the near future. From Porter's perspective, we can see that this type of influence is not much needed in order to make the industry competitive. From the examples provided by Porter's research, we can clearly see that in such countries as Germany, Italy, Japan and South Korea, the governmental influence on the competitive industries of the mentioned above countries was modest and rare (Porter, 1990 (March-April), p. 76). Therefore, this point gives us the following conclusions to consider:

- various co-operations with the international manufacturers through the agreements, enabling the foreign vehicle brands assembly for the local market at the Russian manufacturing locations;
- more of the local car manufacturers will be possibly acquired by their foreign counterparts;
- local demand will not be supported by the government; but by the manufacturers and competition themselves;

AvtoVaz' acquisition by Renault-Nissan has become the first one of the possible future acquisitions. GAZ has been working closely with Volkswagen Group Rus from 2011^{xxi}. This co-operation involves production of Skoda Yeti and Volkswagen Jetta vehicles on the premises of GAZ. Another notable agreements of GAZ are with General Motors, whereas the Chevrolet Aveo is manufactured at the GAZ' manufacturing facilities from 2011. German giant Daimler has signed an agreement with the Nizhny Novgorod's manufacturer on the assembly of the Mercedes-Benz Sprinter LCV. This gives a clear idea, that GAZ management has been keen on the co-operation with the international companies in terms of providing those with its own manufacturing facilities, in order to use those to the fullest capacities.

The home demand makes the industry competitive and successful from various perspectives. According to Porter, the home demand is important regardless of the fact of the spreading globalization (Porter, 1990 (March-April), p. 82). Furthermore, the home demand helps the nations to gain its competitive advantage, if the buyers give the industry a clear picture of their needs, so the industry can adapt and innovate accordingly. Another important note that the home demand helps the industry to adapt the products according to the local values and circumstances. Porter used as an example the living conditions, in which the most Japanese citizens live in – there is small tightly packed housing with high electricity costs and humidity during the summer time. Therefore the need for simple and small air-conditioning gadgets arises, and that is how the local manufacturers offered the compact and quite air-conditioners powered by the

rotary energy-saving compressors. Later on this approach on making the compact and functional gadgets has gathered the international approval and has been used globally. This means that the localization of the ideas can gain the competitive advantage not only domestically, but internationally. What this means for the Russian automotive industry is that the products have to be adapted to the needs of the local population and the circumstances of the business and social environment, in order to meet the home demand.

On the other hand, the presence of the other major companies in the automotive sector, such as AvtoVaz, UAZ and GAZ within the same region, gives the boost to the regional economy of the Volga Federal District and gives another opportunities for the improvement of the competitive advantage. Porter states that the domestic rivalry leads to the innovation and improvement, furthermore it leads to the quality and service improvements. Further localization's concentration within the same region, makes the rivalry more "intense and better" (Porter, 1990 (March-April), p. 85).

5.2 Turning the disadvantages into advantages

According to Michael Porter's research, another important part of making the industry and nation competitive is turning its disadvantages into advantages. On the other hand a number of conditions should be met. There are a lot of examples, where the nations turned its disadvantages into advantages, such as Switzerland and Japan (Porter, 1990 (March-April), p. 79).

The biggest disadvantage of the Russian automotive industry is the lack of the R&D, being behind the worldwide automotive industry leaders and simple designs of the vehicles.

Nevertheless, the conditions of the local Russian automotive market can be considered favourable in order to turn the domestic automotive industry into the competitive one, using its disadvantages.

5.2.1 Low Light Vehicle Density

According to the Ernst&Young's research on Russia's automotive market, in the year 2012 Russia has a considerably low automotive density, making the number of 260 light vehicles per 1000 of population (amount of vehicles divided by the amount of population) (Ernst & Young, 2013, p. 7). While in the other countries, such as USA the density is 641 vehicles per 1000 people, 532 in Germany, 499 in France (top 3).

Light vehicle density, 2012

Country	Population, million	Light vehicle fleet, million	Vehicle density per 1,000 people
US	315.31	202.23	641
Germany	81.89	43.56	532
France	63.61	31.74	499
UK	63.24	31.55	499
Poland	38.32	18.17	474
Czech Republic	10.51	4.64	442
South Korea	48.59	14.61	301
Russia	143.00	37.22	260
Ukraine	44.94	8.04	179
Brazil	198.36	24.93	126
Turkey	74.51	8.35	112
China	1,353.38	69.83	52
India	1,258.35	21.51	17

Figure 4, Light Vehicle Density, 2012. Source: Ernst&Young, 2013. Available at: [http://www.ey.com/Publication/vwLUAssets/Automotive-survey-2013-ENG/\\$FILE/Automotive-survey-2013-ENG.pdf](http://www.ey.com/Publication/vwLUAssets/Automotive-survey-2013-ENG/$FILE/Automotive-survey-2013-ENG.pdf)

Comparing Russia's numbers to the EU (European Union) countries with emerging markets and similar economic conditions, such as Czech Republic and Poland, this gives a room for further development. Poland and Czech Republic were chosen for comparison, since these two countries have faced similar challenges in 1990s, with the change of political and economic systems.



Figure 5, GDP growth (annual %). Source: World Bank. Available at: <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries/RU-PL-CZ?display=graph>

Another reason to compare Russia to Czech Republic and Poland are the economy factors, based on the GDP (gross domestic product) annual growth² and GNI (gross national income) per capita, PPP (purchasing power parity)³. The timeframe chosen is 2000-2012, while Russia has been experiencing the economy growth and Poland and Czech Republic have entered the EU in 2004^{xvii}. These economic indicators of the mentioned above countries are of the approximately same levels and do not vary dramatically. In 2009 there was a clear decrease (see Figure 5, GDP growth (annual %). Source: World Bank. Available at: <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries/RU-PL-CZ?display=graph>) in the GDP annual growth due to the world economic crisis, nevertheless all three countries have recovered in 2010.

² GDP growth (annual %) - Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2005 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. (Source: World Bank, available at: <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries/RU-PL-CZ?display=graph>, last accessed on April 20, 2014)

³ GNI per capita, PPP - GNI per capita based on purchasing power parity (PPP). PPP GNI is gross national income (GNI) converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GNI as a U.S. dollar has in the United States. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. (Source: World Bank, available at: <http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD/countries/RU-PL-CZ?display=graph>, last accessed on April 20, 2014)

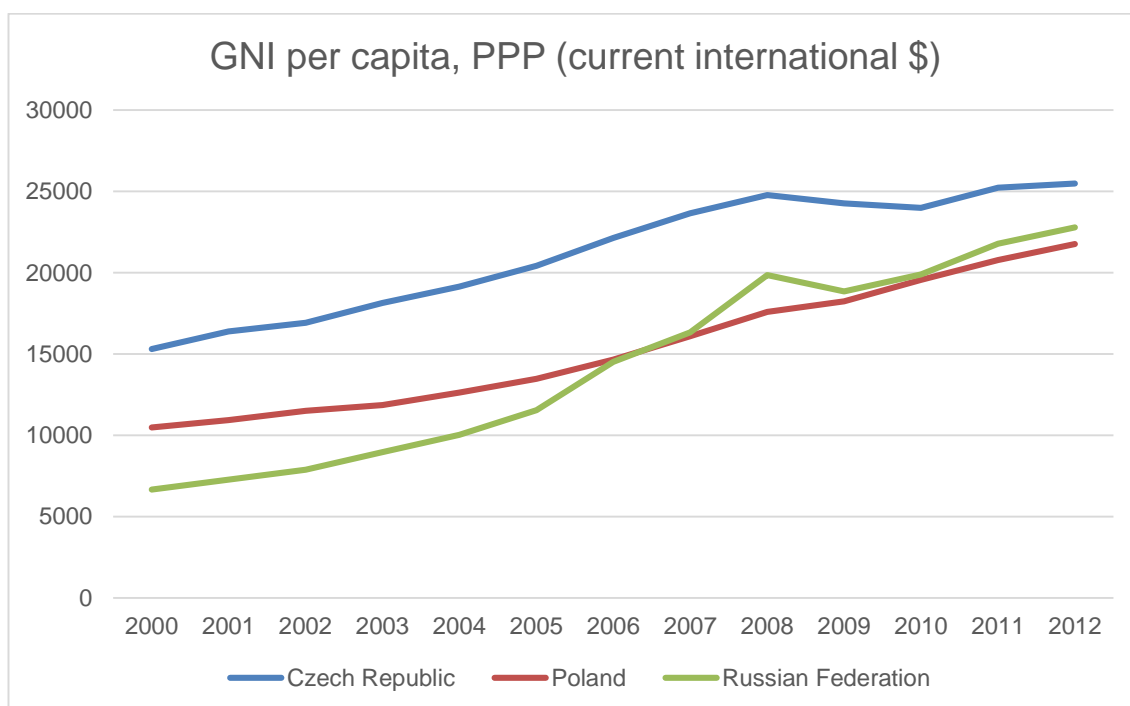


Figure 6, GNI per capita, PPP (current international \$). Source: World Bank. Available: <http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD/countries/RU-PL-CZ?display=graph>

Taking into consideration the low number of vehicle density, it is possible to forecast the further growth in the local manufacturing and production of the Russian affordable brands and the locally-manufactured foreign brands, in order to cover the market demand.

According to the study, conducted by Ernst and Young, another important note is that the number of aging vehicles in Russia is quite high, average 12 years, comparing to 7 years in Europe (Ernst & Young, 2013, p. 11). This means that the car makers can turn this disadvantage of the local market into their advantage, by offering the consumers the new vehicles at affordable price.

5.2.2 Simple designs

The lack of R&D and the local talent in the country does not help Russian automotive industry in terms of the attractive vehicle designs for the consumers. Back in Soviet times, the first Ladas' designs were based on the designs of Italian Fiats (model 124)^{xxiii}. The first manufacturing of the Fiat 124 clones has started back in 1969 and continued till 2012^{xxiv}. The production was ceased in 2012 after the demand for the car has dramatically dropped. Taking into account the fact, that the car model has been

produced for more than 40 years with the same design, it gives a clear idea that the manufacturers were not able to provide the consumers with the vehicles of upgraded features. Another conclusion from this is that the consumers have finally become financially able to purchase the vehicles with higher prices, due to the rising purchase power in Russia.

According to Michael Porter's research, the Japanese manufacturers were able to enter the foreign markets with inexpensive compact cars of an adequate quality (Porter, 1990 (March-April), p. 75). Nonetheless, the car manufacturers have invested heavily into the building modern and powerful manufacturing facilities in order to "reap economies of scale" (Porter, 1990 (March-April), p. 78). Along with that a number of innovations in production and marketing have been implemented, in order to provide the consumers with the end product of a good quality.

At the moment, Russian automotive industry can be compared to the Japanese one from back 1980s, the times when Michael Porter's research was conducted. The local manufacturers started building up the new modern facilities, replacing the old Soviet ones, the change to the market economy has enabled the partnerships with the foreign counterparts, where they can take advantage of the experience and most importantly, they start adopting the global approach to strategy, which is an important prerequisite for achieving the competitive advantage (Porter, 1990 (March-April), p. 78).

Since AvtoVaz' collaboration with Renault-Nissan we can predict the change in the change in the future designs of the vehicles, to take even more after the AvtoVaz' owners' counterparts brands. Meanwhile, the manufacturer UAZ, which is owned by the Russian Sollers^{xxv}, might not follow the adaptation of the foreign designs.

UAZ specializes in producing the SUVs and commercial vehicles. The first Soviet models of the UAZ SUVs were reminiscent of military cars. The simplicity of the design and functionality is the advantage for the SUVs and 4x4 type of cars in agricultural and suburban regions worldwide. Therefore, UAZ can obtain a niche market within Russia and globally, offering the vehicles at affordable price for niche customers at different areas. According to the UAZ website, their current distribution besides Russia is in the CIS countries, Mongolia, Czech Republic, Italy, Laos, Nicaragua and Vietnam^{xxvi}. Such uneven distribution can be explained firstly by the Russian borders (most of the CIS countries and Mongolia share a border with Russia), Czech Republic had close eco-

conomic ties with Soviet Union before its collapse and the UAZ vehicles were distributed there back then and same applies to Vietnam.

5.3 Further Internationalization

The Russian car manufacturers are unlikely to repeat the global success of the Japanese manufacturers from the end of 1980s, when they managed to set up a world-wide distribution with the innovative compact vehicles.

Nevertheless, what Russian car manufacturers can concentrate on is the areas of emerging markets in the world, for example such as Latin America.

According to Porter, besides the product and brand export, the company and the nation should also export the values or lifestyle, just like the widespread of the American fast food or credit cards, whereas the American taste and values in saving time and convenience became global trends (Porter, 1990 (March-April), p. 82).

In this terms, what can Russian car manufacturers offer as a trend to the emerging markets? As it has been previously discussed in the thesis (Chapter 5.2.2), the simple designs and affordability of the cars can provide the market with the trend in simplicity and functionality. Nevertheless, this trend would not be valid for a longer time, since the markets are growing as well as the consumers' needs and desires, therefore the constant update on the idea itself is needed.

At the moment AvtoVaz is actively working on developing its ties with the Latin American markets. According to Rostec's press-release, in 2012 AvtoVaz has started exporting cars to such countries as Peru, Ecuador and Bolivia^{xxvii}. The agreement between AvtoVaz and the local importer includes the 3 years distribution deal on the whole Lada car range, including the spare parts and the further warranty provision.

The successful distribution of the brand and its popularity in the market might lead to the local manufacturing in order to cut costs on the labour costs and other duties. Additionally, locating the manufacturing abroad is another essential part for the industry and nation become competitive. This would also allow the manufacturers to control the market better and gain a better access to the consumers (Porter, 1990 (March-April), p. 78).

Besides providing the world with the distribution of the budget vehicles in developing countries, another popular trend can be utilized within the same idea. The global concern for environment protection has been growing in developed countries and the usage of the cars, which create less pollution, has been growing. Comparing to the usual cars, the price for the eco-friendly vehicles (e-cars or hybrids) is higher. Based on the statistics from the US Bureau of Transportation statistics, the sales growth of the hybrid vehicles in the United States has been stable. In the year 2000 there were sold 9350 hybrid vehicles (none of them are domestically produced) and in the year 2012 there were sold 431798 hybrid vehicles (73% imported)^{xxviii}. This gives an opportunity for the Russian car manufacturers to enter the markets of developed countries with the budget hybrid vehicles. As it was mentioned in the Chapter 4.3 of this thesis, the production of the first Russian hybrid vehicle “Yo-Mobile” has been ceased due to the rising costs of production. Nevertheless, the rights of the developed technology have been transferred to the state-owned institution and can be used for the further development and possible production. Further development of the local budget hybrid-car can help gain the advantage in the local markets with most of the sales potential, including exports abroad.

6 Conclusion

The WTO accession of Russia has brought numerous advantages and disadvantages to various local industries. Opening up the commodity-based economy for a better international trade made the certain industries work hard on improvement, in order to stay independent and gain advantage of the accession.

The automotive industry became one of the vulnerable ones due to the immediate lowered taxes on the car imports and a number of actions had to be taken into consideration, such as selling the biggest car manufacturer to the international automotive alliance.

The national industry's competitiveness became in questions with the possible rise in the car imports, therefore the market would become fair to both the domestic and imported vehicles. Nevertheless, there can be implemented several actions, in order to make the automotive industry competitive in the foreseeable future:

- Strengthening the competition of the local manufacturers within the same geographical area (AvtoVaz/GAZ/UAZ in the Volga Federal District);
- Utilizing the disadvantages of the local cars and converting them in advantages, e.g. the simple designs and budget models;
- Creating the products for the international markets, “exporting” ideas. The developing markets have to be the main point of interest for the Russian car manufacturers in future;
- Utilizing the local R&D and creating the specialized institutions for the further research and development. Currently the local technology of producing budget hybrid cars is controlled by the state-owned research institution. The further development of the technology and institution itself would make the technology become commercial;
- Allocating to the proper market segments domestically and internationally. Russian car manufacturers have several advantages in the local market, which they can utilize wisely. The low car density and the aging vehicle fleet force consumers purchasing the new domestically-produced vehicles. Nevertheless, the rising purchasing power in Russia can lead the consumers to purchase the imported vehicles, therefore a special keen on research and development has to be implemented, in order to make the products constantly upgraded and competitive to the imported counterparts;

- Further expansion to the developing countries and markets. Since the rising purchase power in Russia, the local car manufacturers have to expand to the other markets, where the budget vehicles remain popular among the consumers. Further manufacturing expansion to the developing countries is core, in order to gain the advantage of the local markets and gain the proper control there;
- Following the world-wide trends in car manufacturing and consumer behaviour. Hybrid and e-cars are becoming more popular among the consumers in developed countries due to the high environmental concerns in the society. Creating a budget eco-friendly vehicle can expand greatly the currently niche-market.

In terms of the globalization and a constant growth of the economy, Russia could not avoid entering the WTO. This was another rational step towards the international trade markets, after the collapse of the Soviet Union and the transition from the planned economy to the market economy. The creation of the commodity-based economy heavily based on the natural resources export in 2000s has enabled the government to prepare adequately to the further transition towards the opened market economy.

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